

## ABSTRACT

A resource management system is disclosed that automatically schedules tests for a communication system according to the availability of communication resources requested by the tests. A processing system within the resource management system  
5 selects tests from a test database. The processing system identifies one or more communication resources related to the tests. The processing system determines if the identified communication resources requested by the tests are available for the tests. If the communication resources are available, the processing system generates execute instructions to execute the tests. If the communication resources are not available, the  
10 processing system puts the tests back in the test database until the communication resources are available. The resource management system efficiently schedules tests of a communication system and saves testing time.